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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,509	02/12/2004	Stuart L. Claassen	118584	3681

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OLIFF & BERRIDGE, PLC.  
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ALEXANDRIA, VA 22320-4850

EXAMINER
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MAI, TAN V

ART UNIT	PAPER NUMBER
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2193

NOTIFICATION DATE	DELIVERY MODE
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10/23/2007

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction27074@oliff.com  
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# Office Action Summary

Application No.

10/776,509

Applicant(s)

CLAASSEN ET AL.

Examiner

Tan V. Mai

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 06 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>5/12/04 &amp; 7/8/05</u>  | 6) <input type="checkbox"/> Other: _____                                    |

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1. The abstract of the disclosure is objected to because the Abstract contains the undefined acronym "FIR". All such acronyms should be defined at the instance of their first use within the Abstract. Correction is required. See MPEP § 608.01(b).

2. Claims 3-4, 12-14 and 17-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per dependent claim 3, the phrase "first partial filtered results to be deleted ... without preventing generating the complete filter outputs" seems to be misdescriptive.

Clarification is requested.

As per dependent [apparatus] claims 12-13, "claim 1" is mistyped because claim 1 is a method claim.

As per dependent [apparatus] claims 17-18, claim 1 is a method claim, resulting hybrid claims.

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

The claims recite a method / apparatus for performing a mathematical function. It is noted that apparatus claims 15-16 recite means plus functions. It is unclear the filter apparatus of claims 15-16 are implemented by software, general hardware (e.g.,

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computer) or specific physical structures. Also, it is noted that the "modulated signal" in claim 9 is NOT a tangible physical signal.

"[t]o satisfy section 101 requirements, the claim must be for a practical application of the Sec. 101 judicial exception, which can be identified in various ways:

- . The claimed invention "transforms" an article or physical object to a different state or thing.
- . The claimed invention otherwise produces a useful, concrete and tangible result,..."

See "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" OG Date: 22 November 2005.

In order for claims to be statutory, claims must include a practical application with a concrete, useful, and tangible result. However, claims 1-16 merely disclose elements / steps of performing mathematical function without disclosing a **practical application with a concrete, useful, and tangible result, as they are pre-emptive in any application**. Therefore, claims 1-16 are directed to non-statutory subject matter.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 10 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Staszewski.

Staszewski teaches, e.g., see Fig. 1, the claimed combination elements. They are (1) dividing filter coefficients, (2) filtering input data to generate partial filter results and (3) generating complete filter outputs (106)

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 2-9 and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Staszewski.

Staszewski has been discussed in paragraph # 5 above.

Dependent claims 2 & 11 add "zero padding". The feature is obvious to a person having ordinary skill in the art.

Dependent claims 3-9,12-14 and 17-18 add detail features. The features are obvious to a person having ordinary skill in the art.

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to Staszewski's teachings because the device is a filter for generating a plurality of partial filtered results as claimed.

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Due to the similarity of claims 15-16 to claims 1-3 and 10-12, they are rejected under a similar rationale.

8. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gee.

As per independent claims 1 and 10, Gee discloses, e.g., see Fig. 5, the invention substantially as claimed, including: (1) dividing filter inputs  $x(t)$ , (2) filtering input data to generate partial filter results and (3) generating complete filter outputs  $y(t)$ . It is noted that Gee does not specifically detail the claimed "dividing filter coefficient"; however, "dividing inputs  $x(t)$ " is providing the same the claimed "partial filter results". It would have been obvious to a person having ordinary skill in the art at the time the invention was made to design the claimed invention according to Gee's teachings because the device is a filter for generating a plurality of partial filtered results as claimed.

Dependent claims 2 & 11 add "zero padding". The feature is obvious to a person having ordinary skill in the art.

Dependent claims 3-9, 12-14 and 17-18 add detail features. The features are obvious to a person having ordinary skill in the art.

Due to the similarity of claims 15-16 to claims 1-3 and 10-12, they are rejected under a similar rationale.

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9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cited references are art of interest.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tan V. Mai whose telephone number is (571) 272-3726. The examiner can normally be reached on Mon-Wed and Fri. from 9:30am to 2:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An, can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is:

Official (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.



Tan V. Mai  
Primary Examiner